

Early Spay and Neuter in Dogs: A Discussion of the Medical Issues

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REFERENCES

Cooley, Dawn M., Beranek, B. C., Schlittler, D. L., Glickman, N. W., Glickman, L. T., and Waters, D. J., Endogenous Gonadal Hormone Exposure and Bone Sarcoma Risk. *Cancer Epidemiology, Biomarkers and Prevention.* Vol 11. pp 1434-1440. Nov 2002.

Duerr, Felix M., Duncan, C. G., Savicky, R. S., Park, R. D., Egger, E. L., and Palmer, R. H., Risk factors for excessive tibial plateau angle in large breed dogs with cranial cruciate ligament disease. pp 1688-1691. *JAVMA*, Vol 231, No 11 Dec 1, 2007.

Heflin, Maria. Study Links Ovaries and Longevity. *Veterinary Practice News* Feb 2010.

Kustritz, Margaret V. R., Determining the optimal age for gonadectomy of dogs and cats. pp 1665-1675. *JAVMA*, Vol 231, No 11, Dec. 1, 2007.

Ogilvie, Gregory K. and Anthony S. Moore, *Managing the Veterinary Cancer Patient.* Veterinary Learning Systems Co. Inc. 1995.

Sanborn, Laura J., Long Term Health Risks and Benefits Associated with Spay/Neuter in Dogs. May 14, 2007.

Slauterbeck, J. R., Pankratz, K., Xu, K. T., Bozeman, S.C., and Hardy, D. M., Canine ovariohysterectomy and orchiectomy increases the prevalence of ACL injury. *Clin Orthop Relat Res.* 2004 Dec (429) 301-5.

Spain, C. V., Scarlett, J. M., and Houpt, K. A., Long term risks and benefits of early-age gonadectomy in dogs. pp 380-387. *JAVMA* Vol 224, No 3. Feb 1, 2004.

Veterinary Information Network (www.vin.com)

Oncology Boards

The Pet Health Library-Brooks, Wendy C., Mammary Tumors in Dogs 9/8/09

Ware, W. A., and Hopper, D. L., Cardiac Tumors in Dogs: 1982-1995. *J. Vet Internal Med.* 1999. Mar-Apr;13(2):95-103.

Waters, D. J., Kengeri, S.S., Clever, B., Booth, J.A., Maras, A. H., Schlitter, D. L., and Hayek, M. G., Exploring mechanisms of sex differences in longevity: lifetime ovary exposure and exceptional longevity in dogs. *Aging Cell* 2009, Dec 8(6):752-755.

Zink, C., Early Spay-Neuter Considerations for the Canine Athlete. www.caninesports.com. 2005.